Patient Information Using Narcotrend: Understanding the EEG Brain Monitoring System

Why is EEG monitoring useful during anesthesia? - Advantages and Benefits of Computerized EEG Monitoring -

What is an EEG?

EEG stands for "electroencephalogram." An electroencephalogram is a recording of brain waves. Special adhesive electrodes are attached to the scalp to measure the EEG. These electrodes transfer the brain waves to an EEG measuring device, which records and evaluates the EEG as a curve. This EEG curve allows for the assessment of brain function.

What are the advantages of using the EEG in anesthesia?

Brain function is influenced by medications in a characteristic way, allowing the monitoring of changes in a patient's EEG. Consequently, EEG recording and computer-aided evaluation offer several advantages.

- Checking the depth of sleep during anesthesia:
  Continuous EEG monitoring during anesthesia makes it easier to control the patient's depth of sleep. This allows for better dosing of anesthetic medications and avoids unnecessarily long stays in the recovery room or post-operative ventilation in the intensive care unit.
- Early recognition of dangerous situations:
  Potentially dangerous situations for the patient, such as an undersupply of oxygen or the occurrence of seizure potentials, can be recognized at an early stage with an EEG check.

Which patients in particular benefit from EEG monitoring?

Children and older patients, in particular, benefit from personalized anesthesia guidance based on the EEG. It is more difficult to find the right dose of anesthetic medicines for children because many drugs are not approved for children or are only approved to a limited extent. The dosage is often based on experiences with adults, increasing the risk of incorrect doses. The dose required for older people is often lower; they frequently have concomitant illnesses and limited physical capacity.
EEG monitoring benefits patients of all ages. This balance is achieved through individualized measurements of medication. Computer-assisted EEG monitoring aids in this anesthesiology assessment.